EXCELLA®
ELECTRONICS
Since 1966

HOLLOW SHAFT ENCODER

ERA-85B30/38/40

FEATURES

- Ultra-compact design for direct mounting behind induction motors
- Specially designed for elevator drive applications
- Shatter-proof polycarbonate code disk for enhanced durability
- LED with automatic power compensation for temperature variations and aging
- Robust ASIC-based electronics for reliable performance
- High surge protection across supply voltage
- Powerful output stage suitable for long-distance cable transmission
- High accuracy and stable signal output
- Maintenance-free and long service life



Electrical Characteristics

	TTL / RS422	PP	PPLD / HTL		HV	HVLD
PPR	**100 / 360 / 500 / 1000 / 1024 / 2000 / 2500 / 4096 / 5000**					
Power Supply	4.85 … 5.25 VDC (Ripple Peak to Peak 5%)	5 ..30 VDC (Ripple Peak to Peak 5%)				
Power consumption [No Load]	40mA					
Permissible load / Channel	15mA	20mA	20mA		15mA	15mA
Pulse Frequency	100 kHz	300 kHz	300 kHz		100 kHz	100 kHz
Short circuit proof output	No	Yes	Yes		Yes	Yes
Reverse polarity protection of the power supply	Yes					
Sensing Method	Optical					
Surge protection as per IEC61000-4-5 500V	No	Yes	Yes		Yes	Yes
Duty Cycle	$180^0 \pm 18^0$					
A and B Phase shift	$90^0 \pm 36^0$					

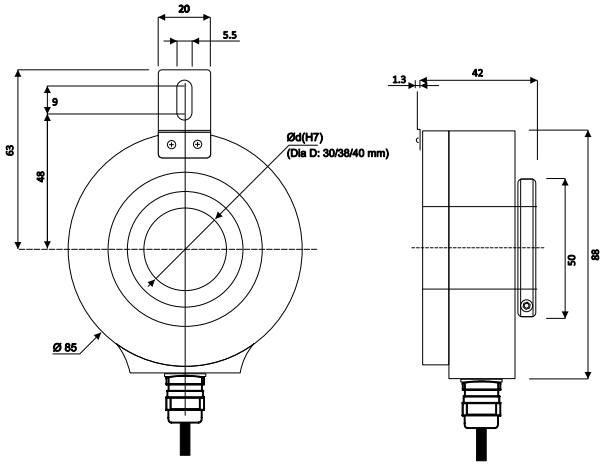
Mechanical characteristics

Shaft Load Capacity	Radial 10kg, Axial 10kg
Max. Speed	2000 RPM
Protection IEC60529	IP50 IP54
Working temperature range	-10...+70°C -20...+100°C (IP50)
Material	Shaft : Aluminum Housing : Cast Alloy Cover : Cast Alloy
Weight	Below 460 grams

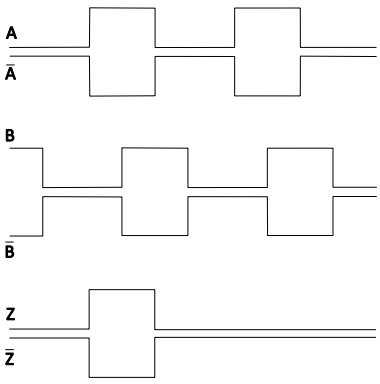
Environmental characteristics

Vibration Resistance 10G ,10---2000Hz as per IEC 60068-2-6, more possible contact factory

Shock Resistance 100G, 6ms as per IEC 60068-2-27, more possible contact factory



OUTPUT WAVEFORM:-
VIEWED FROM C.W DIRECTION FROM ENCODER CLAMP SIDE)



Function	Wire Color
+VDC	RED
COMM	BLACK
A	GREEN
A^-	BROWN
B	WHITE
B^-	BLUE
Z	YELLOW
Z^-	ORANGE
SHIELD	BARE

Applications:
Elevators & Lifts, Hoisting Systems, Induction Motor Feedback, Position & Speed Monitoring