

# ENCODER SOLID SHAFT J-50S

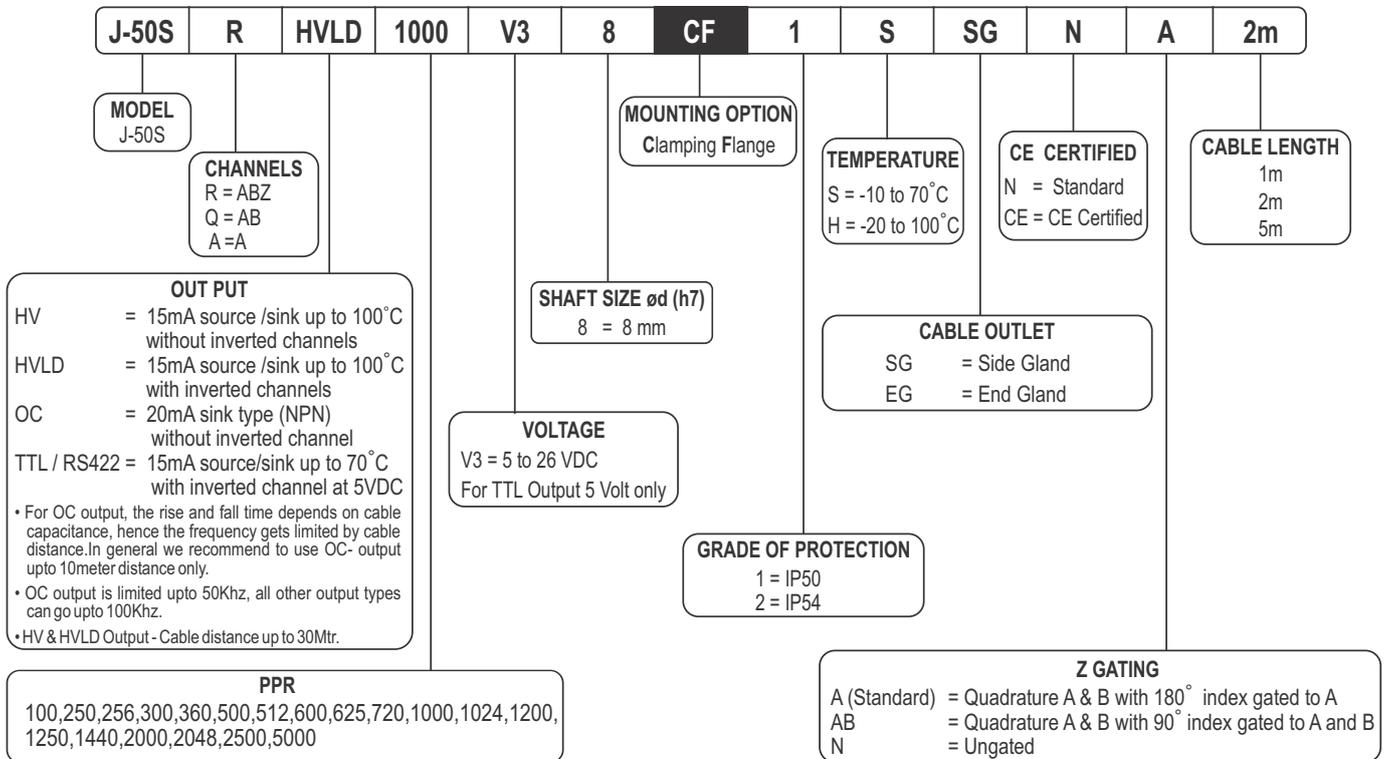


JAYASHREE ENCODERS  
**JENCODER**<sup>TM</sup>  
THE PERFECT CODER  
ISO 9001-2015

## FEATURES

- Encoder designed for Induction motor feedback applications
- Robust design less than 52 mm diameter size with gland and diecast covers
- Shatter proof polycarbonate disk
- LED power compensated for aging and temperature
- Robust ASIC based design
- Robust electrical design capable of taking surge across supply voltage

## ORDERING EXAMPLE - J-50S-R-HVLD-1000-V3-8-CF-1-S-SG-N-A-2m



## Electrical Characteristics

	TTL / RS422	OC	HV	HVLD
Power Supply	4.85 ... 5.25 VDC (Ripple Peak to Peak 5%)			
Power consumption [No Load]	40mA			
Permissible load / Channel	15mA	20mA	15mA	15mA
Pulse Frequency	100 kHz	50 kHz	100 kHz	100 kHz
Short circuit proof output	No	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
Duty Cycle	180° ± 18°			
A and B Phase shift	90° ± 36°			

# ENCODER SOLID SHAFT J-50S

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## Mechanical characteristics

Shaft Load Capacity	Radial 4kg, Axial 2kg
Max. Speed	4500 RPM
Protection IEC60529	IP50, IP54
Working temperature range	-10...+70°C -20...+100°C (IP50)
Material	Shaft : stainless steel Grade 303 alternative Grade 304 Housing : Aluminum Cover : Cast Alloy
Weight	Below 180 grams

## Environmental characteristics

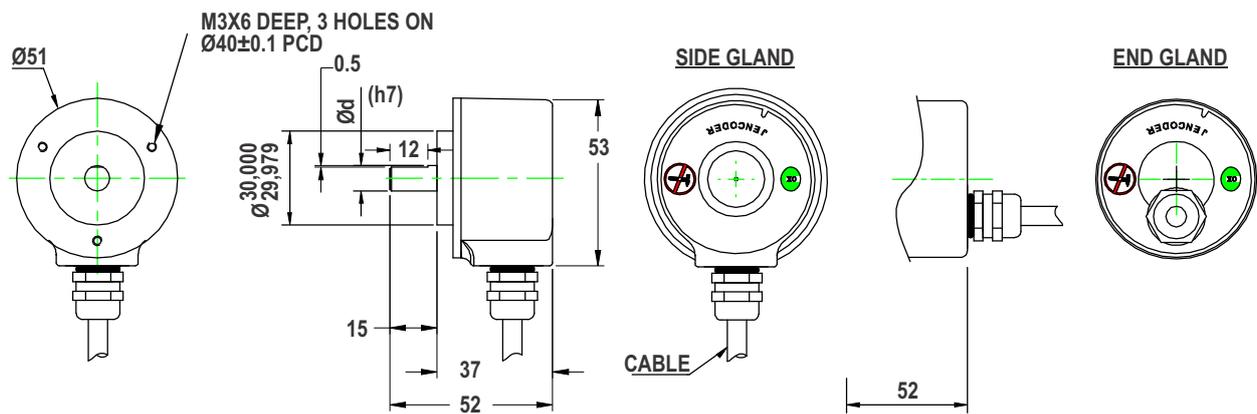
Vibration Resistance	10G, 10--2000Hz as per IEC 60068-2-6, more possible contact factory
Shock Resistance	100G, 6ms as per IEC 60068-2-27, more possible contact factory

## Wiring Detail

Function	HV, OC	Wire color
		HVLD, TTL
+VDC	White	White
COMM	Black	Black
A	Brown	Brown
A'	---	Yellow
B	Red	Red
B'	---	Green
Z	Orange	Orange
Z'	---	Blue
Shield	Bare	Bare

J-50S

CF=Clamping Flange



All dimension are in mm with a tolerance of  $\pm 0.1$  unless otherwise specified

Output Waveform :  
Viewed from Shaft End (CW Direction)

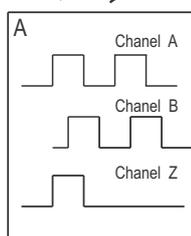


Fig 1 : Quadrature A & B with 180° Index gated to A

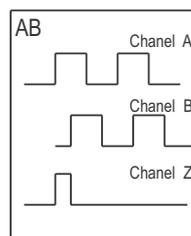


Fig 2 : Quadrature A & B with 90° Index gated to A & B

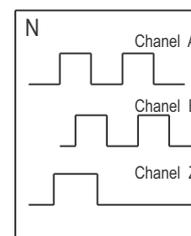


Fig 3 : Quadrature A & B with ungated Index



WORLD CLASS MANUFACTURING FACILITY

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