

ENCODER SOLID SHAFT J-58B

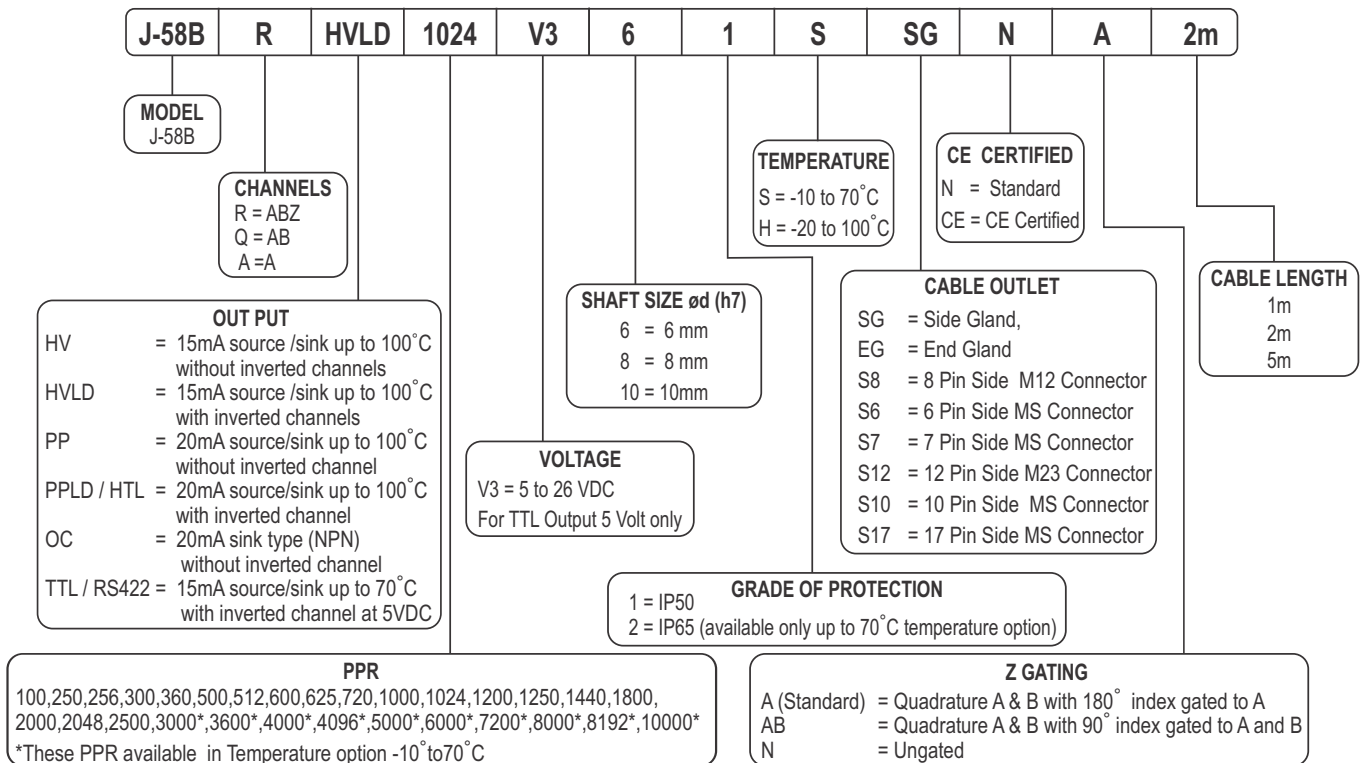
JAYASHREE ENCODERS
JENCODERTM
THE PERFECT CODER
ISO 9001-2015



FEATURES

- Encoder designed for machine tool spindle applications
- Robust design with 58mm diameter with diecast covers and many termination options
- 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
- Output stage with long distance cable driving capability

ORDERING EXAMPLE - J-58B-R-HVLD-1024-V3-6-1-S-SG-N-A-2m



Electrical Characteristics

	TTL / RS422	PP	PPLD / HTL	OC	HV	HVLD
Power Supply	4.85 ... 5.25 VDC (Ripple Peak to Peak 5%)	4.85 ... 26 VDC (Ripple Peak to Peak 5%)				
Power consumption [No Load]	40mA					
Permissible load / Channel	15mA	20mA	20mA	20mA	15mA	15mA
Pulse Frequency	100 kHz	300 kHz	300 kHz	50 kHz	100 kHz	100 kHz
Short circuit proof output	No	Yes	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	Yes
Duty Cycle	180° ± 18°					
A and B Phase shift	90° ± 36°					

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Mechanical characteristics

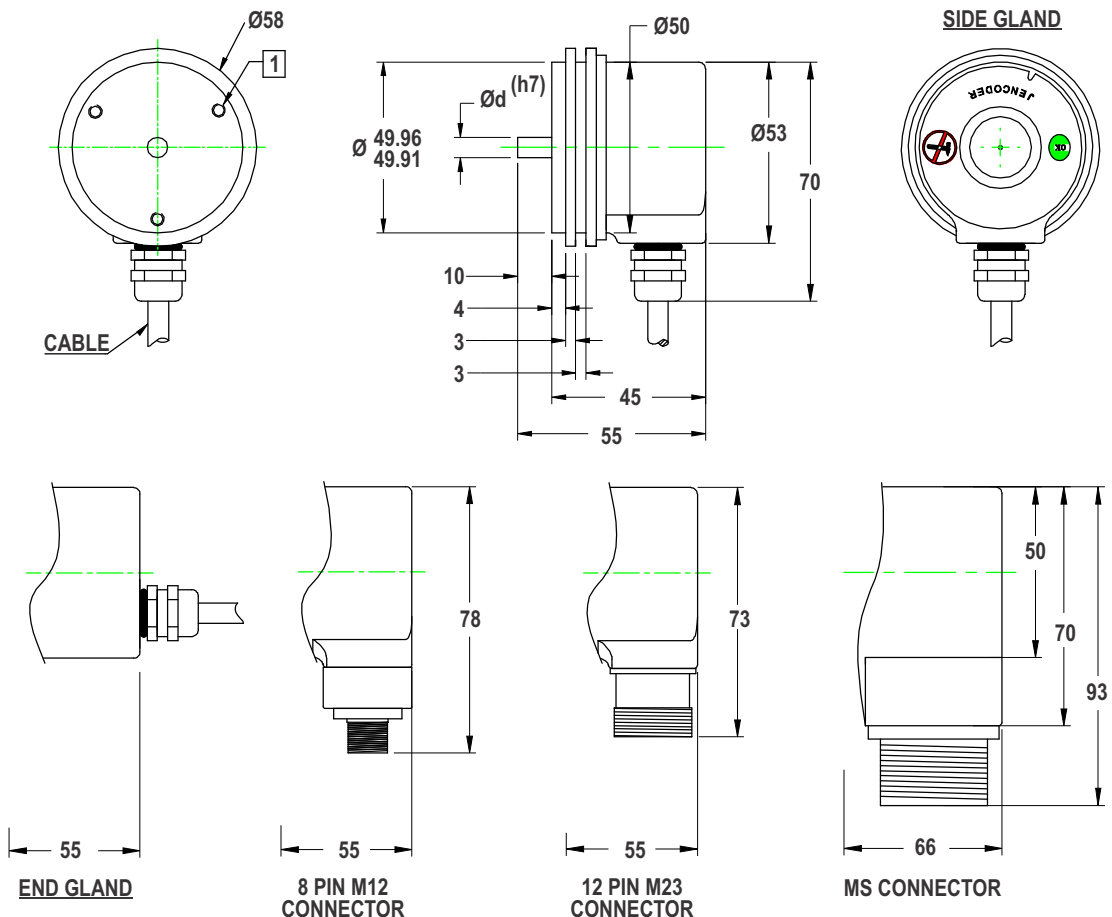
Shaft Load Capacity	Radial 10kg, Axial 10kg
Max. Speed	6000 RPM
Protection IEC60529	IP50
Working temperature range	IP65 -10...+70°C -20...+100°C (IP50)
Material	Shaft : stainless steel Grade 303 alternative Grade 304 Housing : Aluminum Cover : Cast Alloy
Weight	Below 255 grams

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

J-58B

1 M4X6 Deep 3 Holes on $\varnothing 42 \pm 0.1$ PCD at 120°



All dimension are in mm with a tolerance of ± 0.1 unless otherwise specified

Temp °C	Frequency kHz	Voltage V	Load Current	Cable Mtr
70 °C	300Khz	24Vdc	20mA	5 Mtr
70 °C	150Khz	15Vdc	20mA	30 Mtr
70 °C	50Khz	24Vdc	20mA	100 Mtr

- Cable distance 30Mtr for HV & HVLD Output.
- For OC output, the rise and fall time depends on cable capacitance, hence the frequency gets limited by cable distance. In general we recommend to use OC- output upto 10meter distance only.
- OC output is limited upto 50Khz, all other output types can go upto 300Khz.

- Cable length depends upon by operating Voltage, Frequency, Cable capacitance & load. The figures given in above table are representative for PP & PPLD Output.

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Wiring Detail

Function	Wire color		Pin							
	HV,PP,OC	HVLD, PPLD, TTL	6 PIN CONN R-PP	6 PIN CONN Q PPLD	7 PIN CONN R-PP	7 PIN CONN Q PPLD	8 PIN CONN. M12	10 PIN MS	12 PIN (M23)	17 PIN MS
+VDC	White	White	D	D	D	D	2	D	2, 12	H
COMM	Black	Black	F	F	F	F	1	F	10, 11	K
A	Brown	Brown	A	A	A	A	3	A	5	A
A ⁻	----	Yellow	---	C	----	C	4	H	6	N
B	Red	Red	B	B	B	B	5	B	8	C
B ⁻	----	Green	----	E	----	G	6	I	1	R
Z	Orange	Orange	C	----	C	----	7	C	3	B
Z ⁻	----	Blue	----	----	----	----	8	J	4	P
Shield	Bare	Bare	E	NA	E	E	Body	G	9	E, L

Output Waveform :
Viewed from Shaft End  CW Direction

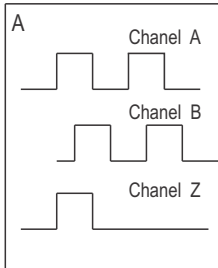


Fig 1 : Quadrature A & B with 180° Index gated to A

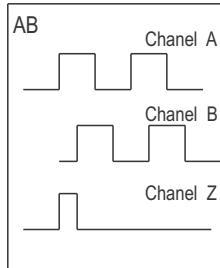


Fig 2 : Quadrature A & B with 90° Index gated to A & B

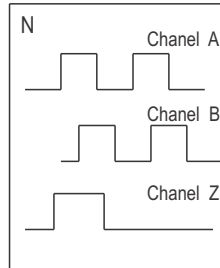
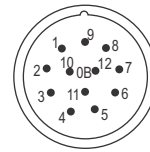
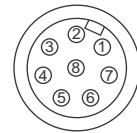


Fig 3 : Quadrature A & B with ungated Index

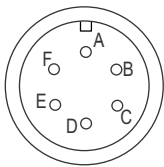
M23 Connector
12 Pin-Male



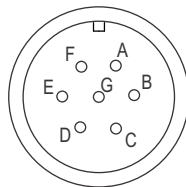
M12 Connector
8 Pin-Male



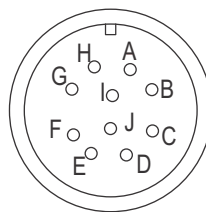
6 Pin MS
Connector



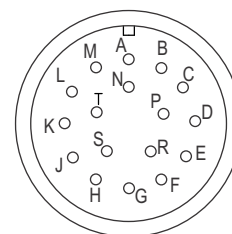
7 Pin MS
Connector



10 Pin MS
Connector



17 Pin MS
Connector



WORLD CLASS MANUFACTURING FACILITY

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