Analog Single-turn Absolute Encoder SES38

Features and applications:

- Output signal 4-20mA，0-5V，0-10V，0-20mA
- The internal parameters can be set intelligently by software, which is more convenient to connect
- European standard mounting dimensions, axial type mounting or blind hole type mounting,easy mounting and no need to reset
- Analog signal output with a group of RS485 signals, can match any controller and PLC in order to save the cost of the controller
- The protection class is up to IP65, and the operating temperature can reach -25°C...+85°C, which is perfect for application and any industrial automation
- With safety lock bearing design, it can prevent misalignment caused by large axial load during operation and mounting of large-size and high-quality bearing sets

Model	SES38-J	SES38-T	SES38-K
Housing diameter	Ø 38mm		
Feature	Solid shaft with clamping flange	Solid shaft with synchronous flange	Blind hole bushing flange
Shaft size	Axial type Ø6mm	Axial type Ø6mm	Hole diameter Ø4、5、6、8mm
Output signal	4-20mA，0-5V，0-10V，0-20mA（angle, length and speed application output can be set)		
Power supply	5....30VDC （reverse polarity protection, over-voltage protection)		
Single-turn resolution	12-bit 4096 line or 16-bit 65536 line（Programmable setting)		
Number of turn	1 turn		
Repeat-ability accuracy	±2BIT		
Current consumption	< 30mA(24Vpower supply) no load		
Signal adjustment	The corresponding value of each turn is adjustable, the total number of turns is adjustable, the total resolution is adjustable, the direction is adjustable, the preset position is adjustable, and the external zero position is adjustable		
Max.speed	3000r/min		
Shaft load	Radial 40N, axial20N		
Protection class	IP65		
Starting torque	≤3Ncm		
Operating temperature	-25°C....85°C（operating temperature can be customized between-40°C....85°C)		
Storage temperature	-40°C....100°C		
Shock resistance	1000m/s^2 , 6ms（100g)		
Vibration resistance	10g		
Connection type	8-core shielded cable or aviation plug		
Connection position	Radial side outgoing, axial rear outgoing		

Wiring table

Color	Brown	White	Pink	Black	Green	Yellow	Blue	Gray
Signal	**Vcc**	**0V**	4-20mA+	4-20mA-	RS485A	RS485B	Setting is allowed	External setting

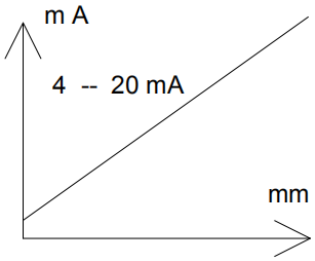
Use of setting line (gray)

When the device needs to find the zero point or re-calibrate the zero position, please short-circuit the gray line with the 24V power supply for 3-5 seconds. After the time is reached, please remove the gray line. This is the encoder change default to the zero point of this position.

Use of programming allowable line (blue)

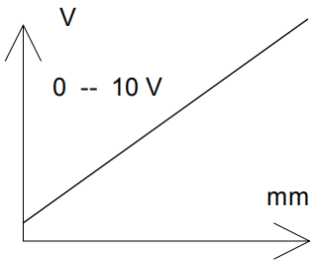
When setting the mode, the blue wire and brown wire of the encoder are connected to the positive power supply together, and the white wire is connected to the power ground wire. At this time, the communication rate of the encoder is fixed at 19200bps. In non-setting mode, i.e, when working normally, it is recommended to connect the blue and white wires together to the power ground wire.

Principle diagram:



Current output diagram

Note: The horizontal axis represents length, speed, etc.(can be customized), and the vertical axis represents the analog signal output



Voltage output diagram

Ordering Reference:

	1	2	3	4	5	6	7	8	9
Absolute value encoder	**SES38J -**	**XXX**	**XXX**	**XX**	**-XXX**	**X**	**- X**	**XX**	**– XX**
1. Specification series									
	SES38J								
	SES38T								
	SES38K								
2. Output signal									
RL1 4 - 20mA	**RL1**								
RV0 0 - 10V	**RV0**								
RV5 0 - 5V	**RV5**								
RL0 0 - 20mA	**RL0**								
3. Number of turn									
B01 1 turn			**B01**						
4. **Resolution per revolution**									
12 12 bit（4096 resolution）standard product				**12**					
16 16 bit（65536 resolution）				**16**					
5. **Mechanical mounting dimension drawing and ordering code**									
For details, please refer to the mechanical dimension ordering code of small single-turn absolute encoder									
6. Protection class and body material									
0 Protection class IP65, aluminum alloy body						**0**			
7. Connection position									
A Axial rear outgoing							**A**		
R Radial side outgoing							**R**		
8. **Connection type**									
A1 Cable Ø6.8mm，8x2x0.35mm^2，1m（Standard 1 meter cable, length can be customized according to requirements）								**A1**	
AC Plug 8 pins								**AC**	

Analog Single-turn Absolute EncoderSEA58

Features and applications:

- Output signal 4-20mA，0-5V，0-10V，0-20mA
- The internal parameters can be set intelligently by software, which is more convenient to connect
- European standard mounting dimensions, axial type mounting or blind hole type mounting,easy mounting and no need to reset
- Analog signal output with a group of RS485 signals, can match any controller and PLC in order to save the cost of the controller
- The protection class is up to IP68, and the operating temperature can reach -40°C...+85°C, which is perfect for application and long-term underwater work
- With safety lock bearing design, it can prevent misalignment caused by large axial load during operation and mounting of large-size and high-quality bearing sets
- Stainless steel explosion-proof heavy loaded encoder can be selected, with**EX II 2 G Ex ib IIB T4 Gb EU** explosion-proof grade certification, which is the protection for petrochemical and explosion-proof equipment.

Model	SEA58-J	SEA58-K	SEA58-H	SEA58-T
Housing diameter	Ø 60mm			
Feature	Solid shaft with clamping flange	Top wire blind hole type	Holding ring blind hole type	Solid shaft with synchronous flange
Shaft size	Solid Ø6，8，10、12、15mm	Blind hole type Ø6、8，10，12，14，15，16，18，20，22mm		solid Ø6mm
Output signal	4-20mA，0-5V，0-10V，0-20mA（angle, length and speed application output can be set）			
Supply voltage	5....30VDC or 5VDC (reverse polarity protection, over-voltage protection)			
Single-turn resolution	Standard 12-bit 40960line（Max. 16-bit 65536）			
Number of turn	1 turn			
Repeat-ability accuracy	±2BIT			
Current consumption	< 30mA(24Vpower supply) no load			
Signal adjustment	corresponding value of each turn/ direction / preset position/ external zero position available			
Max.speed	3000r/min			
Shaft load	Radial 80N, axial 40N			
Protection class	IP65 or IP68			

Starting torque	≤3Ncm
Operating temperature	-30°C....85°C（operating temperature can be customized between-40°C....85°C）
Storage temperature	-40°C....100°C
Shock resistance	1000m/s^2 , 6ms（100g）
Vibration resistance	20g
Connection type	8-core shielded cable or aviation plug
Connection position	Radial side outgoing, axial rear outgoing

Wiring table

Color	Brown	White	Pink	Black	Green	Yellow	Blue	Gray
Signal	**Vcc**	**0V**	Analog quantity +	Analog quantity -	RS485A	RS485B	Setting is allowed	External resetting

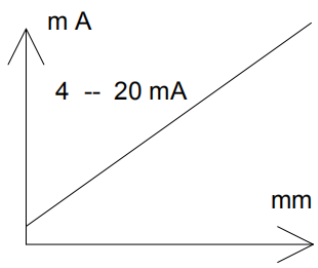
Use of setting line (gray)

When the device needs to find the zero point or re-calibrate the zero position, please short-circuit the gray line with the 24V power supply for 3-5 seconds. After the time is reached, please remove the gray line. This is the encoder change default to the zero point of this position.

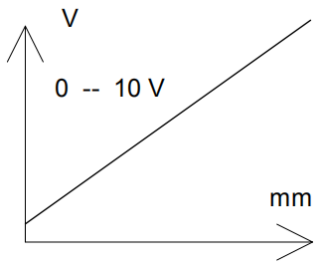
Use of programming allowable line (blue)

When setting the mode, the blue wire and brown wire of the encoder are connected to the positive power supply together, and the white wire is connected to the power ground wire. At this time, the communication rate of the encoder is fixed at 19200bps. In non-setting mode, i.e, when working normally, it is recommended to connect the blue and white wires together to the power ground wire.

Principle diagram:



Current output diagram



Voltage output diagram

Ordering Reference:

	1	2	3	4	5	6	7	8	9
Absolute value encoder	**SEA58 -**	**XXX**	**XXX**	**XX**	**-XXX**	**X**	**- X**	**XX**	**- XX**
1. Specification series	**SEA58J**								
	SEA58K								
	SEA58H								
	SEA58T								
2. Output signal									
RL1 4 - 20mA	**RL1**								
RV0 0 - 10V	**RV0**								
RV5 0 - 5V	**RV5**								
RL0 0 - 20mA	**RL0**								
3. Number of turn									
B01 1turn			**B01**						
6. **Resolution per revolution**									
12 12 bit（4096 resolution）standard product				**12**					
13 13 bit（8192 resolution）				**13**					
16 16 bit（65536 resolution）				**16**					
7. Mechanical mounting dimension									
For details, please refer to the mechanical dimension ordering code of SAA58 single-turn absolute encoder									
6. Protection class and body material									
0Protection class IP65, aluminum alloy body						**0**			
S Protection class IP68, aluminum alloy body (can work underwater for a long time)						**S**			
VProtection class IP66, stainless steel heavy-loaded body						**V**			
W Protection class IP68, stainless steel heavy-loaded body (can work underwater for a long time)						**W**			
H Protection class IP66, aluminum alloy body (-40°C military grade low temperature standard)						**H**			
7. Connection position							**A**		
AAxial rear outgoing							**R**		
R Radial side outgoing									
8. **Connection type**									
A1Cable Ø6.8mm，8x2x0.35mm^2，1m(standard one meter cable, length can be customized according to requirements)								**A1**	
AC Plug 8 pins								**AC**	
AB Plug 12-core M23								**AB**	
9. EX explosion-proof type									
EX explosion-proof encoderEX II 2G Ex ib IIB T4 Gb									**EX**

SSI Single-turn Absolute Encoder SEA58

Features and applications:

- International standard SSI synchronous serial signal
- It can be used interchangeably with any SSI encoder, which is more convenient to connect
- European standard mounting dimensions, axial type mounting or blind hole type mounting,which is more convenient for mounting
- SSI digital output, the fastest clock frequency can be set to 1MHZ, high speed, high industrial grade
- The protection class is up to IP68, and the operating temperature can reach -40°C...+85°C, which is perfect for application and long-term underwater work
- With safety lock bearing design, it can prevent misalignment caused by large axial load during operation and mounting of large-size and high-quality bearing sets.
- Stainless steel explosion-proof heavy loaded encoder can be selected, with**EX II 2 G Ex ib IIB T4 Gb**EU explosion-proof grade certification, which is the protection for petrochemical and explosion-proof equipment.

Model	SEA58-J	SEA58-K	SEA58-H	SEA58-T
Housing diameter	Ø 60mm			
Feature	Solid shaft with clamping flange	Top wire blind hole type	Holding ring blind hole type	Solid shaft with synchronous flange
Shaft size	solid Ø6，8、10、12mm	Blind hole type Ø6、8，10，12，14，15，16、18、20、22mm		solid Ø6、8 、10mm
Output signal	SSI synchronous serial			
Supply voltage	10....30VDC or 5VDC (reverse polarity protection, over-voltage protection)			
Single-turn resolution	Standard 12-bit 4096 and 13-bit 8192 (Maximum optional 16-bit 65536 line)			
Number of turn	1 turn			
Repeat-ability accuracy	±2BIT			
Current consumption	< 40mA(24Vpower supply) no load			
Signal adjustment	Both direction and external zero position can be adjusted			
Coding	Gray code or binary			
Max.speed	5000r/min			
Shaft load	Radial 80N,axial40N			
Protection class	IP65or IP68			
Starting torque	≤3Ncm			
Operating temperature	-35°C....85°C (operating temperature can be customized between-45°C....85°C)			
Storage temperature	-40°C....100°C			
Shock resistance	1000m/s^2, 6ms (100g)			
Vibration resistance	20g			
Connection type	8-core shielded cable or aviation plug			
Connection position	Radial side outgoing, axial rear outgoing			

Wiring table

Color pin	Brown 2	White 1	Green 3	Yellow 4	Gray 5	Pink 6	Black 9	Blue 8
Signal	**Vcc**	**0V**	CLOCK+	CLOCK-	DATA+	DATA-	Reset	Rotary direction

Description of SSI protocol

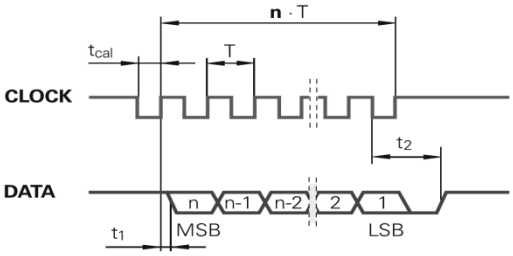
SSI is a synchronous serial signal, the actual two pairs of RS422, one pair of clock trigger, one pair of data transmission.

As shown in the figure on the right, the absolute position value of the encoder is triggered by the clock signal of the receiving device, starting from the high bit (MSB) of the Gray code, and outputting a serial signal synchronized with the clock signal. The clock signal is sent from the receiving device, and N interrupted pulses are output with the total number of bits of the encoder. When the signal is not transmitted, the clock and data bits are both high bits. At the first falling edge of the clock signal, the current value starts to be stored. From the rising edge of the clock signal, the data signal begins to be transmitted, and a clock pulse synchronizes one bit of data.

Where: t3 is the recovery signal, waiting for the next transmission; N=13;16;25;28. According to the total number of bits of the encoder. T=4—11us; t1=1—5.5us; t2≤1us; t3=11—15.5us (Clock- and Date- omitted not shown)

In actual use, in order to ensure the stability of the signal and the long transmission distance, the recommended parameters are as follows:

T=8us（125KHz）; t1=4us; t2′（actual reading delay time）=3-4us; t3=15us



Ordering Reference:

	1	2	3	4	5	6	7	8	9
Absolute value encoder	**SEA58J -**	**XXX**	**XXX**	**XX**	**-XXX**	**X**	**- X**	**XX**	**- XX**

1. Specification series **SEA58K**

SEA58H

SEA58T

2. Output signal

SG SSI Gray code output **SG**

SB SSI binary code output **SB**

3. Number of turn

B01 1 turn **B01**

4. Resolution per revolution

12 12 bit（4096 resolution）standard product **12**

13 13 bit（8192 resolution） **13**

14 14 bit（16384 resolution） **14**

16 16 bit（65536 resolution） **16**

5. Mechanical mounting dimension

For details, please refer to the order code for mechanical dimension of SAA58 single-turn absolute encoder

6. Protection class and body material

0 Protection class IP65, aluminum alloy body **0**

S Protection class IP68, aluminum alloy body (can work underwater for a long time) **S**

V Protection class IP66, stainless steel heavy-loaded body **V**

W Protection class IP68, stainless steel heavy-loaded body (can work underwater for a long time) **W**

H Protection class IP66, aluminum alloy body (-40°C military grade low temperature standard) **H**

7. Connection position **A**

A Axial rear outgoing **R**

R Radial side outgoing

8. **Connection type**

A1 Cable Ø6.8mm，8x2x0.35mm^2，1m (standard one meter cable, length can be customized according to requirements) **A1**

AC Plug 8 pins **AC**

AB Plug 12-core M23 **AB**

EX

9. EX explosion-proof type

EX **explosion-proof encoder EX II 2G Ex ib IIB T4 Gb**

Parallel Single-turn Absolute Encoder SEA58

Features and applications:

- Parallel Gray code and binary code
- Push-pull output is compatible with NPN and NPN, with short circuit protection, more convenient to connect
- European standard mounting dimensions, axial type mounting or blind hole type mounting,which is more convenient for mounting
- Resolution up to 16 bits, SMD technology high integrated circuit, high speed, high industrial grade
- The protection class is up to IP68, and the operating temperature can reach -40°C...+85°C, which is perfect for application and long-term underwater work
- With safety lock bearing design, it can prevent misalignment caused by large axial load during operation and mounting of large-size and high-quality bearing sets.

Model	SEA58J	SEA58T	SEA58H
Housing diameter	Ø 58mm		
Feature	Solid shaft with clamping flange	Solid shaft with synchronous flange	Holding ring blind hole type
Shaft size	Solid Ø10mm	Solid Ø6mm	Blind hole type Ø8，10，12，14，15mm
Output signal	Parallel push-pull output		
Supply voltage	10....30VDC or 5VDC(reverse polarity protection, over-voltage protection)		
Resolution per revolution	Standard 12-bit 4096 and 13-bit 8192, maximum 16-bit 65536 (128，256，512，1024，2048，4096，8192，65536 optional)		
Number of turn	1 turn		
Repeat-ability accuracy	±2BIT		
Current consumption	< 50mA(24Vpower supply) no load		
Signal adjustment	The direction can be adjusted, and external can be reset		
Coding	Gray code or binary		
Max.speed	6000r/min		
Shaft load	Radial 80N,axial40N		
Protection class	IP6 or IP68		
Starting torque	≤3Ncm		
Operating temperature	-30°C....85°C（operating temperature can be customized between-40°C....85°C）		
Storage temperature	-40°C....100°C		
Shock resistance	1000m/s^2, 6ms（100g）		
Vibration resistance	20g		
Connection type	8-core shielded cable or aviation plug		
Connection position	Radial side outgoing, axial rear outgoing		

Wiring table

Color	White	Brown	Green	Yellow	Gray	Pink	Blue	Red	Black	Purple	Gray-Pink
Signal	**Bit1**	**Bit2**	**Bit3**	**Bit4**	**Bit5**	**Bit6**	**Bit7**	**Bit8**	**Bit9**	**Bit10**	**Bit11**
Color	**Blue-Red**	**White-Green**	**Brown-Green**	**White-Yellow**	**Yellow-Brown**	**Pink-Brown**	**Brown-Blue**	**White-Blue**	**White-Red**	**Brown-Red**	
Signal	**Bit12**	**Bit13**	**Bit14**	**Bit15**	**Bit16**	**Preset value**	**Locked**	**Direction code**	**10-30V**	**0V**	

Input, counting direction selection (V/R)

The counting direction of absolute value encoder is defined by clockwise rotation counting increase and counterclockwise rotation counting decrease. The counting direction selection can be changed by the input signal V/R. If the input signal is not used, the counting direction is defined as the standard. The input class is "1" and the pulse width is T>10ms.

Input class "1" or not used = count increases when rotating clockwise.

Input class "0" = count decreases when rotating clockwise.

Input, temporarily latched (LATCH)

When the LATCH input is valid, the parallel interface data is "frozen", which can prevent data changes during the reading and reduce data errors (especially for binary codes). Pulse width T>100μs.

Input class "1" = position data is latched and output at this value unchanged.

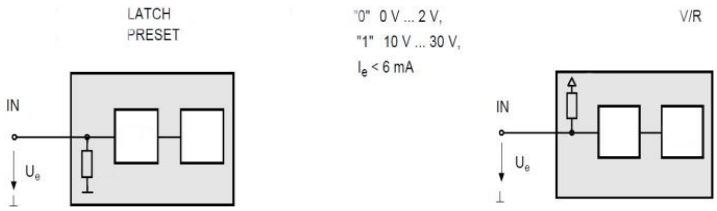
Input class "0" or not used = real-time free output of position data.

Input preset "0" (preset function)

The preset zero position is actually the encoder presets the electrical zero position through the input signal, and the pulse width T>10ms.

Input class "0" or not used = no effect.

Input class "1" = set to 0.



Ordering Reference:

	1	2	3	4	5	6	7	8	9
Absolute value encoder	**SEA58J -**	**XXX**	**XXX**	**XX**	**-XXX**	**X**	**- X**	**XX**	**- XX**
1. Specification series									
	SEA58H								
	SEA58T								
2. Output signal									
PG Parallel Gray code output		**PG**							
PB Parallel binary code output **PB**									
3. Number of turn									
B01 1 turn			**B01**						
4. Resolution per revolution									
12 12 bit（4096 resolution）standard product				**12**					
13 13 bit（8192 resolution）				**13**					
5. Mechanical mounting dimension									
For details, please refer to the order code for mechanical dimension of SAA58 single-turn absolute encoder									
6. Protection class and body material									
0Protection class IP65, aluminum alloy body						**0**			
S Protection class IP68, aluminum alloy body (can work underwater for a long time)						**S**			
VProtection class IP66, stainless steel heavy-loaded body						**V**			
W Protection class IP68, stainless steel heavy-loaded body (can work underwater for a long time)						**W**			
H Protection class IP66, aluminum alloy body (-40°C military grade low temperature standard)						**H**			
7. Connection position									
A Axial rear outgoing							**A**		
R Radial side outgoing							**R**		
8. **Connection type**									
A1Cable Ø6.8mm，8x2x0.35mm^2，1m(standard one meter cable, length can be customized according to requirements)								**A1**	
AC Plug 8 pins								**AC**	
AB Plug 12-core M23								**AB**	
9. EX explosion-proof type									**EX**
EX explosion-proof encoder EX II 2G Ex ib IIB T4 Gb									

CAN open Single-turn Absolute EncoderSEA58

Features and applications:

- International standard CANopen protocol
- Multi-turn maximum 30 bits, detachable modular bus adapter, address can be set freely, more convenient for connection
- European standard mounting dimensions, axial type mounting or blind hole type mounting, terminal wiring is more convenient for mounting
- The protection class is up to IP68, and the operating temperature can reach -40°C...+85°C, which is perfect for application and long-term underwater work
- With safety lock bearing design, it can prevent misalignment caused by large axial load during operation and mounting of large-size and high-quality bearing sets.
- Stainless steel explosion-proof heavy loaded encoder can be selected, with**EX II 2 G Ex ib IIB T4 Gb** explosion-proof grade certification, which is the protection for petrochemical and explosion-proof equipment.

Model	SEA58J	SEA58T	SEA58H
Housing diameter	Ø 58mm	Ø 58mm	Ø 58mm
Feature	Solid shaft with clamping flange	Solid shaft with synchronous flange	Holding ring blind hole type
Shaft size	Solid Ø6、8，10，12，14，15mm	Solid Ø6、8、10mm	Blind hole type Ø6、8，10，12，14，15mm

Output signal	International standard CANopen protocol for selection
Supply voltage	10....30VDC (reverse polarity protection, over-voltage protection)
Single-turn resolution	Standard 13-bit 8192, maximum 16-bit 65536
Number of turn	1 turn
Coding	Binary code
Repeat-ability accuracy	±2BIT
Current consumption	<50mA(24Vpower supply) no load
Programmable parameters	The corresponding value of each turn is adjustable, software limit switch, rotation direction, preset value, rate output, rate time base, baud rate
Max. speed	6000r/min
Shaft load	Radial 110N, axial 40N
Protection class	IP65 or IP66
Starting torque	≤3Ncm
Operating temperature	-40°C....85°C（operating temperature can be customized between-40°C....85°C）
Storage temperature	-40°C....100°C
Shock resistance	1000m/s^2 , 6ms（100g）

Vibration resistance	20g
Connection type	Three-hole adapter terminal wiring
Connection position	Radial side outgoing

Programmable parameters

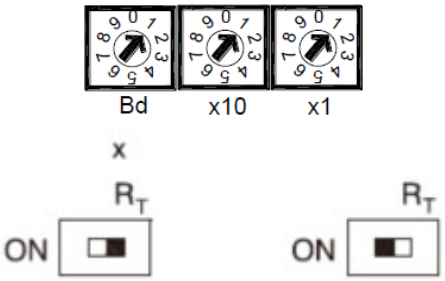
Operating parameters	The counting direction can be defined by the operation parameter, which determines the counting direction and whether the output code is increasing or decreasing.
Single-turn resolution	The resolution parameter can be programmed, and the resolution per revolution can be set as required.
Total resolution	This parameter value corresponds to the position value corresponding to the entire measurement length, and it cannot exceed the total resolution of the absolute encoder. In the normal mode, the settable value can only be a multiple of 2.
Preset value	This function is used to set the actual value of the absolute encoder to the desired position value.
Limit switch, min/max	The two positions can be programmed. If the measured value exceeds the range between these two values, the encoder will set one of the 32 bits high.

Programmable transfer mode

Query mode	The host obtains the current position data by remotely transmitting communication instructions, the absolute encoder reads the current position, calculates according to the set parameters, and then returns the actual value through the same CAN identification unit.
Cycle mode	The absolute value encoder transmits the current actual value cyclically, without the host issuing an instruction. This cycle time can be programmed and rewritten, between 1 and 65536ms, in milliseconds.
Sync mode	After the controller receives the synchronous signal, the encoder starts to transmit the current actual value. If multiple nodes respond to the synchronous signal, each node responds one by one according to the CAN recognizer. There is no programmable compensation time, and the synchronous counter can be programmed, so that the encoder does not transmit until a certain number of synchronization signals.

Configuration with connecting cap

When setting, remove the two screws to open the connection cap.



Baud rate

Baud rate	Switch position	Baud rate	Switch position
20	0	500	5
50	1	800	6
100	2	1000	7
125	3	Reserved	8

LED indicator

There are two LEDs on the back of the connection cap to show the status of the device. It is very helpful when installing and setting the encoder.

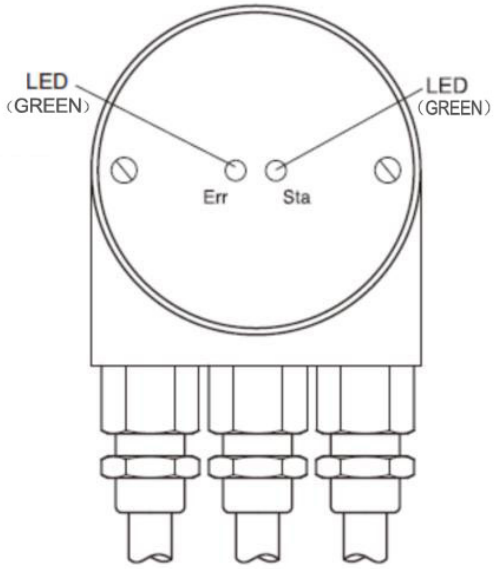
250	4	Set SDO and LSS mode	9

Node address

The node setting is completed by the 2 knob switches in the connecting cap. The address range is from 0 to 89, and each address can only be assigned once. The node address number defined in the encoder is automatically +1.

Terminal resistance

The terminal resistance RT (120Ω) is integrated in the connection cap. If the encoder is connected to the end or start of the bus, the terminal resistance must be opened.



LED (red)	LED (green)	Meaning
Dark	Dark	No power
Dark	Bright	The encoder is ready, but the start message is not transmitted. Possible reasons: no other slaves, baud rate error and the encoder isin ready state.
Flash	Bright	The flashing start message has been transmitted and the device can be configured.
Bright	Bright	Under normal working mode, the encoder is in working state.

Setting

The factory standard configuration of the encoder is: the node address is 32, the baud rate is 20KBaud, and the data transmission cycle time is 0ms (i.e, no cycle). For different applications, customers can use SDO messages to set. The effective baud rate ranges from 20kBaud to 1MBaud, the node number ranges from 0 to 89, and the cycle time ranges from 1ms to 65536ms.

Note: The encoder will automatically add 1 to the set node address number.

Electrical interface

The absolute rotary encoder with cable and plug interface is designed in accordance with the standardized CiA DR303-1 cable and plug protocol. There are various electrical connection options, such as 5-pin M12 plugs. The encoder can be connected in the following ways:

-5-pin M12 male plug and a 5-pin female plug

-5-pin M12 plug and vent

-9-pin D-Sub plug or cable outlet (not applicable to heavy-loaded version)

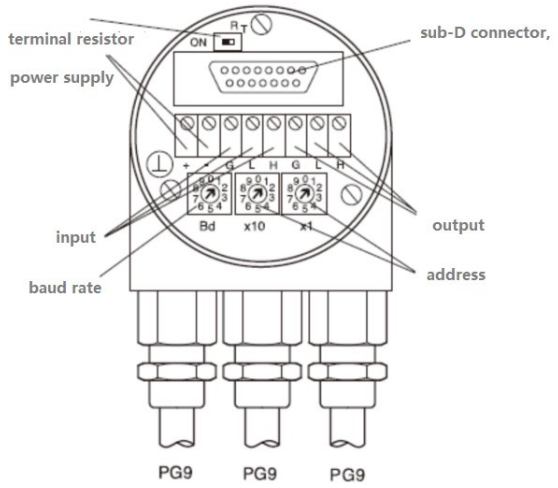
Electrical signal wiring table for plug/cable:

Connection plan

Function	Wire end	Connector Pin RJ45	Connector Pin M12
Can High	white	1	4
Can Low	brown	2	5
Can-GND	green	3	1
GND	yellow	4	3
+ U_b= 10-30 V	red	8	2

Mount the connection cap

The connection of two or three cables to the rotary encoder depends on whether the power supply is integrated in the bus cable or connected separately. If the power supply is integrated in the bus cable, the cable gland can be mountedthrough a plug. The cable gland is suitable for cables with a diameter of 6.5 to 9mm.



Function No.	Description
⊥	Grounding
+	10…30V power supply
-	0V power supply
G left	CAN grounding（bus in）
L left	CAN low（bus in）
H left	CAN high（bus in）
G right	CAN grounding（bus out）
L right	CAN low（bus out）
H right	CAN high（bus out）

Ordering Reference:

	1	2	3	4	5	6	7	8	9
Absolute value encoder	**SEA58J -**	**XXX**	**XXX**	**XX**	**-XXX**	**X**	**- X**	**XX**	**- XX**
1. Specification series	**SEA58T**								
	SEA58H								
2. Output signal									
CA CANopen output**CA**									
3. Number of turns									
B01 1 turn			**B01**						
4. **Resolution per revolution**									
12 12 bit（4096 resolution）standard product				**12**					
13 13 bit（8192 resolution）				**13**					
14 14 bit（16384 resolution）				**14**					
16 16 bit（65536 resolution）				**16**					
5. Mechanical mounting dimension									
For details, please refer to the order code for mechanical dimension of SAA58 single-turn absolute encoder									
6. Protection class and body material									
0Protection class IP65, aluminum alloy body						**0**			
S Protection class IP68, aluminum alloy body (can work underwater for a long time)						**S**			
VProtection class IP66, stainless steel heavy-loaded body						**V**			
W Protection class IP68, stainless steel heavy-loaded body (can work underwater for a long time)						**W**			
H Protection class IP66, aluminum alloy body (-40°C military grade low temperature standard)						**H**			
7. Connection postion									
A Axial rear outgoing							**A**		
R Radial side outgoing							**R**		
8. **Connection type**									
A1Cable Ø6.8mm, 8x2x0.35mm2 ,1m (standard one meter cable, length can be customized according to requirements)								**A1**	
AC Plug8 pins								**AC**	
AB Plug12-core M23								**AB**	
9. EX explosion-proof type									**EX**
EX explosion-proof encoder EX II 2G Ex ib IIB T4 Gb									