



Absolute rotary encoder CAS38---RC with CAN2.0B output



★Before using the encoder, please read the following instructions and use it correctly!

Mechanical Spec.		Electrical Spec.	
Max Speed	6000 RPM	Power supply	10-30Vdc (5Vdc optional)
Load	Axial 40N, Radial 100N	Current consumption	< 50mA (24Vdc)no load
Shock	1000m/s ² (6ms), 等于 100g	output	CAN 2.0B protocol
Vibration	200m/s ² (10-2000Hz), 等于 20g	Linear resolution	1/4096FS max.
Allow axial runout	±1.5mm		
Allow radial runout	±0.2mm	positioning accuracy	0.1°
Structure	38mm outer, solid shaft or Blind hole	Operating temperature	-40℃~100℃
Connection Type	8-core shielded cable or aviation connector	Storage temperature	-40℃~85℃
IP	IP65		

connection:

function	Vcc	GND	CAN H	CAN L	reset	setting	shield
color	Brown	White	Green	Yellow	Grey	Blue	Thick red

Note: 1. Use of reset line (gray)

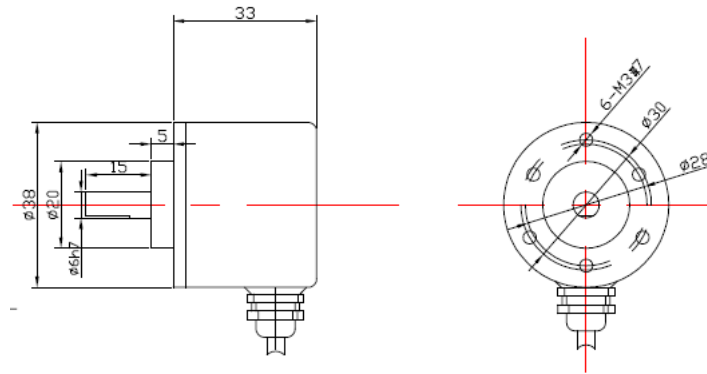
When the reset line (gray) touches Vcc for more than 1 second, the current data of the encoder becomes the reset value (zero point)

Factory specifications:

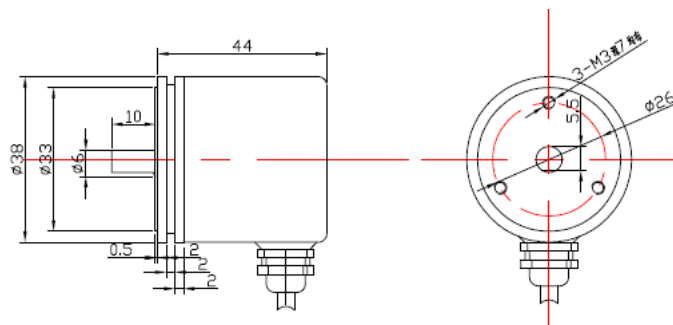
add	Baud rate	Operating mode	Frame format	direction	resolution	Reset value	Transmission cycle
182	125K	Asynchronous mode	Standard frame	CW	16384	1	16ms

Mechanical drawing:

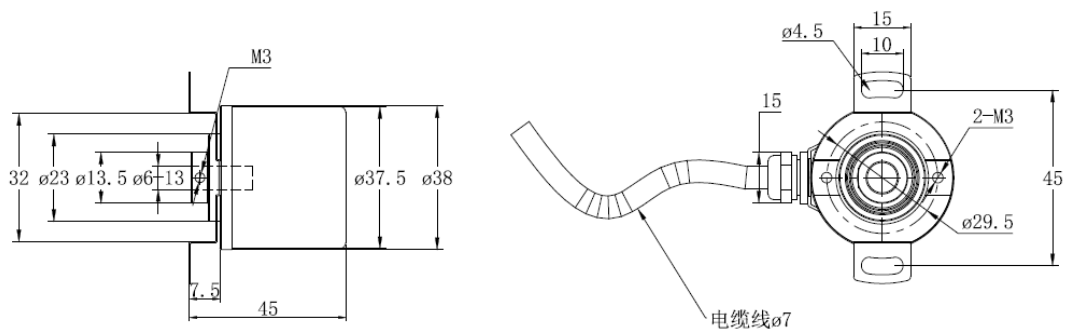
Clamping flange (default)



Synchronous flange



Blind hole



Encoder parameter setting: the setting line must be connected to the high level when modifying parameters. The baud rate is fixed at 250K.

The message for modifying the node number is as follows: The default node number of the encoder is 16 # 182, and the sending ID is 182

ID DATA
182 22 00 30 00 83 01 00 00

Encoder feedback:

ID DATA
182 23 00 30 00 83 01 00 00

Set the value to 16#183, then the node number of the encoder after modification is 16#183, and the new node number will take effect immediately after modification.

Modify the baud rate message as follows: the default baud rate of the encoder is 250K,

ID DATA
182 22 01 30 00 03 00 00 00
Encoder feedback:
ID DATA
182 23 01 30 00 03 00 00 00

08	10K
07	20K
06	50K
05	100K
04	125K
03	250K
02	500K
01	800K
00	1000K

Modify the working mode message as follows: The encoder defaults to asynchronous mode 08

ID DATA
182 22 02 30 00 08 00 00 00

08	Asynchronous mode
09	Synchronous mode

Encoder feedback:

ID DATA
182 23 02 30 00 08 00 00 00

Modify the output frame mode message as follows: the encoder default standard frame

ID DATA
182 22 03 30 00 00 00 00 00

00	Standard frame
04	Extended frame

Encoder feedback:

ID DATA
182 23 03 30 00 00 00 00 00

The modification direction message is as follows: the encoder defaults clockwise data increase

ID DATA
182 22 00 60 00 04 00 00 00

04	CW
05	CCW

Encoder feedback:

ID DATA
182 23 00 60 00 04 00 00 00

Modify the encoder single-turn resolution message as follows: encoder default resolution 4096

ID DATA
182 22 01 60 00 0 01 00 00

Encoder feedback:

ID DATA
182 23 01 60 00 01 00 00 00

The message to modify the encoder reset value is as follows: the encoder default encoder setting value 1

ID DATA

182 22 03 60 00 01 00 00 00

Encoder feedback:

ID DATA

182 23 03 60 00 01 00 00 00

Modify the encoder transmission cycle message as follows: the encoder default encoder transmission cycle 16ms

ID DATA

182 22 17 10 00 10 00 00 00

Encoder feedback:

ID DATA

182 23 17 10 00 10 00 00 00

The encoder reads the parameter message as follows: ID is fixed at 601

ID DATA

601 22 18 20 00 00 00 00 00

Encoder feedback:

ID DATA

182 00 10 00 00 00 10 00 00

address + resolution 4 bytes + reset value 4 bytes

182 04 05 08 00 32 00 00 00

address + baud rate + direction + Active/passive mode + Frame format + Output time

Send successful	601	DATA	STANDARD	8	22 18 20 00 00 00 00 00	16
Receive	182	DATA	STANDARD	8	00 10 00 00 00 10 00 00	16
Receive	182	DATA	STANDARD	8	03 04 08 00 10 00 00 00	16

The encoder read data message is as follows:

ID DATA

182 22 00 00 00 00 00 00 00

Encoder feedback:

ID DATA

182 01 00 00 00 00 00 00 00

Encoder reset message is as follows:

ID DATA

182 22 06 00 00 22 06 00 00

Encoder feedback:

ID DATA

182 23 06 00 00 23 06 00 00